



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,033	02/23/2004	Kevin C. Black	BIOFO-03.US 5338-03-10	3789

7590 08/26/2005

David J. French  
 Stn. "D"  
 P.O. Box 2486  
 Ottawa, K1P 5W6  
 CANADA

EXAMINER

ALIMENTI, SUSAN C

ART UNIT

PAPER NUMBER

3644

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/783,033	<b>Applicant(s)</b> BLACK ET AL	
	<b>Examiner</b> Susan C. Alimenti	<b>Art Unit</b> 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A-SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) 35-37 and 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-27,30,31,33,34,38 and 39 is/are rejected.
- 7) ☒ Claim(s) 28,29 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of 35-37 and 40 in the reply filed on 14 July 2005 is acknowledged. The traversal is on the grounds that the amendment to claim 40, as being dependant upon 39, renders the restriction requirement moot. This is not found persuasive because a restriction between an apparatus and method of use is still proper if the apparatus is usable in a materially different process. As stated in the restriction requirement, the apparatus of claims 1-34, and 38 is usable in a variety of different processes, e.g. injecting fluid into the human body, distributing glue on a work surface, etc.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 35-37, and 40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species and method, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 14 July 2005.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 21, and 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claims 21 and 23-25, the word "means" is preceded by the word "spring" in an attempt to use a "means" clause to recite a claim element as

Art Unit: 3644

a means for performing a specified function. However, since no function is specified by the word preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 21-24, 31, 33, and 34, rejected under 35 U.S.C. 102(b) as being anticipated by Skinkle et al. (US PG PUB 2001/0056259 A1).

Skinkle et al. (Skinkle hereafter) discloses the claimed invention comprising a canister 20, 50 having an interior cavity and an outlet port 30, a partition 40, sealably 45 disposed in the canister 20, 50 and dividing said canister in a first chamber 80 and a second chamber 90. A rubber valve/closure 35 is disposed at the outlet port 30 and permits the release of fluid from the first chamber 80. A spring 60 is disposed in the second chamber 90, and oriented to apply a force on the partition 40 in a direction towards valve/closure 35. A nozzle 70 having a bore therethrough is shaped on a first end 305 for communication with the outlet port 30 and a second end ready for connection with the object being injected. Upon connection of the nozzle 70 with the outlet port 30, a dispensing flow path is opened up through the valve closure, permitting fluid to pass from the first chamber 80 through said outlet port.

Art Unit: 3644

Regarding claim 22, the valve/closure 35 is a self-sealing plug due to the “duck-bill” design 305, and the nozzle 70 comprises a needle 75 positioned for insertion through the plug, thus permitting flow of fluid therethrough.

Regarding claim 23, there is considered to inherently be a compressed gas in second chamber 90, since as liquid is filled into first chamber 80, the volume of second chamber 90 decreases and therefore the spring and air contained therein becomes depressed as well.

Regarding claim 24, spring 60 is a mechanical spring.

Regarding claim 31, outlet port 30 has a tapered seat and is read broadly to receive plug 35, which also has a tapered portion that is symmetrical, and therefore complimentary, to the taper on outlet port 30.

Regarding claim 33, when canister portion 50 is removed from portion 20, the size and shape of the top and bottom are complimentary, thus permitting consecutive canisters 20 to be fitted into each other for stacking.

Finally regarding claim 34, Skinkle's valve closure 35 is made of rubber (Skinkle, [0053]), which is considered to comprise styrene butadiene.

7. Claims 21, 30, 38 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Graber (USPN 4,596,088).

Graber discloses a device for injecting fluid into a tree comprising a canister 10 having an interior cavity and an outlet port 23, a partition 40, sealably 25 disposed in the canister 10 and dividing said canister into a first chamber 21 and a second chamber 75. A one-way valve/closure 24 is disposed at the outlet port 23 and permits the release of fluid from the first

Art Unit: 3644

chamber 21. A spring 70 is disposed in the second chamber 75, and oriented to apply a force on the partition 40 in a direction towards valve/closure 24. A nozzle 30 having a bore therethrough is shaped on a first end for communication with the outlet port 23 and a second end 31 ready for connection with the object being injected. Upon connection of the nozzle 30 with the outlet port 23, a dispensing flow path is opened up through the valve closure, permitting fluid to pass from the first chamber 21 through said outlet port 23.

Regarding claims 30, 38 and 39, the second end 31 is of a tapered form and ready for insertion into the bark of a tree to provide a jam-fit connection.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim are 25-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Skinkle as applied to claims 21, 22, and 24 above, and further in view of Rake et al. (USPN 6,251,098).

Regarding claim 25, Skinkle disclose the claimed invention except Skinkle does not utilize a plurality of nested springs. Rake discloses a similar pressure-type dispenser and teaches the use of two nested springs to further facilitate automatic injection of a fluid. Multiple springs provide increased force and higher fluid flow rates. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a plurality of springs with

Art Unit: 3644

Skinkle's injector in order to provide a greater force to the partition, thus varying the fluid flow rates.

Regarding claims 26 and 27, Skinkle, as modified, discloses the claimed invention except he does not positively state the extension or depression of spring 60. It would have been obvious to one having ordinary skill in the art at the time the invention was made to set the maximum extension of the spring to 30-70% of the maximum potential expansion, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

#### ***Allowable Subject Matter***

10. Claim 28, 29, and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan C. Alimenti whose telephone number is 571-272-6897.

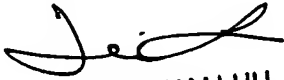
The examiner can normally be reached on Monday-Friday, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3644

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan C. Alimenti

  
TERI PHAM LUU  
SUPERVISORY  
PRIMARY EXAMINER